

REMARKS

Claims 1, 4 - 7, 10 - 12, 14, 16 - 17, 21 - 23, 25 - 26, and 30 - 31 are pending.

Claims 2, 3, 8, 9, 13, 15, 18 - 2, 24, and 27 - 30 have been cancelled. Claims 1, 7, 14, 16, 23, 25, 30, and 31 have been amended. No new matter has been introduced.

Reexamination and reconsideration of the application are respectfully requested.

In the July 14, 2005, the Examiner rejected claims 1, 2, 4, 5, 7, 8, 10, 11, 13, 14, 18, 21, 23, and 30 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,438,128 to Kashyap ("the Kashyap reference"). The Examiner rejected claims 3, 9, 15 - 17, and 20 under 35 U.S.C. § 103(a) as being unpatentable over the Kashyap reference in view of U.S. 6,661,787 to O'Connell et al ("the O'Connell reference"). The Examiner rejected claims 6, 12, 22, and 31 under 35 U.S.C. § 103(a) as being unpatentable over the Kashyap reference in view of the U.S. Published Patent Application No. 2002/0191599 to Parthasarathy et al. ("the Parthasarathy reference"). These rejections are respectfully traversed in so far as they are applicable to the presently pending claims.

Claim 14, as amended, distinguishes over the cited references.

A method of routing a data packet, comprising:  
receiving a data packet from the first InfiniBand node, at a remote virtual network interface device connected to an Infiniband switch and an Ethernet switch, wherein the data packet includes a destination media access control (MAC) address;  
**reading the destination MAC address;**  
**comparing the destination MAC address to a range of MAC addresses;**  
**transferring the data packet to a second InfiniBand node if the destination address of the data packet is within the range of the MAC addresses; and**  
**delivering the data packet to the Ethernet switch if the destination address of the data packet is not within the range of the MAC addresses.**

The applicant notes that the Examiner did not provide a rejection for claims 19 and 28, which (before cancellation in this amendment) included limitations reciting that destination indicators were compared to known values.

The Kashyap reference does not disclose, teach, or suggest the method of claim 14. The Kashyap reference discloses that a data packet is sent from a first adapter, e.g., a host channel adapter (HCA), through an Infiniband switch to a target control adapter. The packet is sent for routing to another communication network, such as an Ethernet network. The packet has a first part intended to have a value greater than or equal to the predetermined number to signify a type. This first part of the packet may have an Ethertype field. The TCA removes this header from the Infiniband packet and relays the remaining raw datagram or packet to the Ethernet network adapter. The Ethernet network adapter receives this packet and sends it over the Ethernet communication network. (*Kashyap, abstract and col. 7, lines 49 - 65*).

The Kashyap reference does not disclose that **a destination MAC address is compared to a range of MAC addresses** because the TCA of the Kashyap reference discloses only removing the header from the Infiniband packet and relaying the remaining raw datagram over the Ethernet communication network. The Examiner admits this because the Examiner states that the Kashyap reference is silent as to a range of media control addresses. (*Office Action, page 6*). Thus, there is no disclosure in the Kashyap reference that **the destination MAC address is compared to a range of MAC addresses**. In addition, there is no disclosure that the Kashyap TCA transfers **the data packet to a second InfiniBand node if the destination address is within the range of MAC addresses**, nor is there disclosure that **the data packet is**

**delivered to the Ethernet switch if the destination address of the data packet is not within the range of the MAC addresses, as is recited in claim 14, as amended.** Accordingly, applicant respectfully submits that claim 14, as amended, distinguishes over the Kashyap reference.

The O'Connell reference does not make up for the deficiencies of the Kashyap reference. The Examiner utilizes the O'Connell reference to disclose that a known value is a range of MAC addresses. (*Office Action, page 6.*) Specifically, the O'Connell reference is directed to the use of an address cache which is based on network addresses of end stations. The O'Connell reference also discloses that in order to access such an integrated cache, the device needs to be able to respond to both MAC addresses (layer 2) and network addresses (layer 3). (*O'Connell, col. 2, lines 48 - 58.*)

The O'Connell reference does not disclose, teach, or suggest a method for routing a data packet including reading the destination MAC address, **comparing the destination MAC address to a range of MAC addresses, transfers the data packet to a second InfiniBand node if the destination address of the data packet is within the range of the MAC addresses; and delivering the data packet to the Ethernet switch if the destination address of the data packet is not within the range of the MAC addresses.** The O'Connell reference does not disclose the utilization of the Infiniband architecture. Accordingly, applicants respectfully submit that claim 14, as amended, distinguishes over the Kashyap / O'Connell combination.

The Parthasarathy reference does not make up for the deficiencies of the Kashyap and O'Connell references. The Examiner utilizes the Parthasarathy reference to disclose that the remote virtual interface is virtualized by implementing microcode in

a set of integrated circuits. (*Office Action, page 7*). Assuming, *arguendo*, that the Parthasarathy reference discloses all that the Examiner states that it does, the Parthasarathy reference does not disclose a method for routing a data packet including reading the destination MAC address, **comparing the destination MAC address to a range of MAC addresses, transfers the data packet to the second InfiniBand node if the destination address of the data packet is within the range of the MAC addresses; and delivering the data packet to the Ethernet switch if the destination address of the data packet is not within the range of the MAC addresses.**

Accordingly, applicant respectfully submits that claim 14, as amended, distinguishes over the Parthasarathy / Kashyap / O'Connell combination.

Independent claims 1, 7, and 23, all as amended, recite limitations similar to claim 14, as amended. Accordingly, applicant respectfully submits that claims 1, 7, and 23 distinguish over the Parthasarathy / Kashyap / O'Connell combination for reasons similar to those discussed above in regard to claim 14.

Claims 4 - 6, 10 - 12, 16 - 17, 21 - 22, 25 - 26, and 30 - 31 depend, indirectly or directly on claims 1, 7, 14, and 23. Accordingly, applicant respectfully submits that claims 4 - 6, 10 - 12, 16 - 17, 21 - 22, 25 - 26, and 30 - 31 distinguish over the Parthasarathy / Kashyap / O'Connell combination for the same reasons as those discussed above in regard to claim 14.

///

///

///

///

Applicant believes that the claims are in condition for allowance, and a favorable action is respectfully requested. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles telephone number (213) 488-7100 to discuss the steps necessary for placing the application in condition for allowance should the Examiner believe that such a telephone conference would advance prosecution of the application.

Respectfully submitted,

PILLSBURY WINTHROP SHAW PITTMAN LLP

Date: October 14, 2005

By: Mark R. Kendrick  
Mark R. Kendrick  
Registration No. 48,468  
Attorney For Applicant

725 South Figueroa Street, Suite 2800  
Los Angeles, CA 90017-5406  
Telephone: (213) 488-7100  
Facsimile: (213) 629-1033